

CLAIMS

1 - 48. (Canceled)

49. (Currently Amended) A method for treating a chemically sensitive individual having an irregular cell cycle for T lymphocytes, the method comprising the steps of:

- (a) collecting a blood sample from the individual;
- (b) determining an initial status of the cell cycle for T lymphocytes;
- (c) (b) isolating mixed T and B lymphocytes from the blood sample;
- (d) (e) propagating the isolated mixed T and B lymphocytes to obtain propagated lymphocytes;
- (e) (d) lysing the propagated lymphocytes to obtain a lysate; and
- (f) (e) administering the lysate to the individual.

50. (Previously Presented) The method according to Claim 49, wherein the step of collecting a blood sample further comprises the step of: collecting the blood sample from the individual by venipuncture in heparinized tubes.

51. (Previously Amended) The method according to Claim 49, wherein the step of isolating mixed T and B lymphocytes from the blood sample further comprises the steps of: separating the erythrocytes and neutrophils from the lymphocytes of the blood sample by a sodium diatrizoate and polysucrose density gradient technique to obtain a lymphocytic sample; centrifuging the lymphocytic sample; separating and combining the lymphocytic layers from the centrifuged lymphocytic sample; and washing the combined lymphocytic layers to obtain the isolated mixed T and B lymphocytes.

52. (Previously Presented) The method according to Claim 49, wherein the step of propagating the isolated mixed T and B lymphocytes further comprises the steps of: culturing the isolated mixed T and B lymphocytes with a cell growth medium at about 37°C.

53. (Previously Presented) The method according to Claim 52, wherein the cell growth medium is supplemented with bovine calf serum.

54. (Previously Presented) The method according to Claim 52, wherein the step of propagating the lymphocytes further comprises the steps of: centrifuging the cultured lymphocytes; removing the supernate from the centrifuged lymphocytes; and washing the centrifuged lymphocytes in normal saline with further centrifugation to obtain the propagated lymphocytes.

55. (Previously Presented) The method according to Claim 49, wherein the step of lysing the propagated lymphocytes further comprises the steps of: suspending the propagated lymphocytes in normal saline solution; sonicating the suspended lymphocytes; and filtering the sonicated lymphocytes to obtain the lysate.

56. (Previously Presented) The method according to Claim 49, wherein the step of administering the lysate to the individual further comprises the step of: determining a therapeutic dose of the lysate by skin testing.

57. (Previously Presented) The method according to Claim 56, wherein the step of administering the lysate to the individual comprises the step of: injecting the individual subcutaneously with the therapeutic dose of the lysate.

58. (Previously Presented) The method according to Claim 57, further comprising the step of: injecting the individual subcutaneously with at least one additional therapeutic dose of the lysate.

59. (Previously Presented) The method according to Claim 49, further comprising the steps of: measuring the clinical symptoms and signs of the individual before administering the lysate, and then measuring clinical symptoms and signs of the individual after administering the lysate.

60. (Currently Amended) A method for treating a chemically sensitive individual having an irregular cell cycle for T lymphocytes, the method comprising the steps of:

- (a) collecting a blood sample from the individual by venipuncture in heparinized tubes;
- (b) ~~determining an initial status of the cell cycle for T lymphocytes;~~
- (c) ~~(b)~~ isolating mixed T and B lymphocytes from the blood sample by:
 - (i) separating the erythrocytes and neutrophils from the lymphocytes of the blood sample by a sodium diatrizoate and polysucrose density gradient technique to obtain a lymphocytic sample;
 - (ii) centrifuging the lymphocytic sample;
 - (iii) separating and combining the lymphocytic layers from the centrifuged lymphocytic sample; and
 - (iv) washing the combined lymphocytic layers to obtain the isolated mixed T and B lymphocytes;
- (d) ~~(e)~~ propagating the isolated mixed T and B lymphocytes to obtain propagated lymphocytes by:
 - (i) culturing the isolated mixed T and B lymphocytes with a cell growth medium at about 37°C;
 - (ii) centrifuging the cultured lymphocytes;
 - (ii) removing the supernate from the centrifuged lymphocytes; and
 - (iv) washing the centrifuged lymphocytes in normal saline with further centrifugation to obtain the propagated lymphocytes;
- (e) ~~(d)~~ lysing the propagated lymphocytes to obtain a lysate by:
 - (i) suspending the propagated lymphocytes in normal saline solution;
 - (ii) sonicating the suspended lymphocytes; and
 - (iii) filtering the sonicated lymphocytes to obtain the lysate; and
- (f) ~~(e)~~ administering the lysate to the individual by:
 - (i) determining a therapeutic dose of the lysate by skin testing; and
 - (ii) injecting the individual subcutaneously with the therapeutic dose of the lysate.

61. (Previously Presented) The method according to Claim 60, wherein the cell growth medium is supplemented with bovine calf serum.

62. (Previously Presented) The method according to Claim 60, wherein the culture is monitored until the yield is approximately $5-8 \times 10^6$ cells per ml.

63. (Previously Amended) The method according to Claim 60, wherein the step of administering the lysate to the individual further comprises the step of: injecting the individual subcutaneously with at least one additional therapeutic dose of the lysate.

64. (Previously Presented) The method according to Claim 60, further comprising the steps of: measuring the clinical symptoms and signs of the individual before administering the lysate, and then measuring clinical symptoms and signs of the individual after administering the lysate.

65 – 66. (Canceled).

67. (New) A method according to Claim 49, wherein the step of determining the initial status of the cell cycle comprises the steps of: adding lysing buffer to a portion of the cell sample; adding DNA stain and RNase to the portion of the cell sample; analyzing the portion of the DNA stained cell sample with flow cytometry to determine the DNA distribution in the cell cycle.

68. (New) A method according to Claim 67, wherein the step of analyzing the portion of the cell sample further comprises the step of: passing the DNA stained portion of the cell sample through a fluorescence spectrometer.

69. (New) A method according to Claim 49, wherein the step of determining the initial status of the cell cycle further comprises the step of: calculating the DNA distribution in the cell cycle by parametric analysis of the accumulated fluorescence data to produce a DNA histogram.